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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/094,052	06/09/1998	PETER W.J. JONES	47513	7937
21874	7590	08/13/2004	EXAMINER	
EDWARDS & ANGELL, LLP			NGUYEN, THONG Q	
P.O. BOX 55874			ART UNIT	PAPER NUMBER
BOSTON, MA 02205			2872	

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/094,052

Applicant(s)

JONES, PETER W.J.

Examiner

Thong Q Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,7 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-5, 7, 11 and 13-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/7/2004 has been entered.

Response to Amendment

2. The present Office action is made in response to the amendment filed on 6/7/2004. It is noted that in the mentioned amendment, applicant has made amendments to claims 1, 4, 13 and 14 and canceled claims 2-3 and 8-9 (Note: Claims 6 and 10 were canceled in the amendment filed on 2/8/2001). The remaining claims 1, 4-5, 7, 11 and 13-15 are examined in this Office action and claim 12 has been withdrawn from further consideration as directed to non-elected species. See reason(s) as set forth below.

Election/Restrictions

3. The application as previously filed contains claims 1-5, 7-9 and 11-15. The previous claims were subjected to a restriction requirement which details was set forth in the Office action of 1/7/2002. In the Election of 6/17/02, applicant elected the species (a). The claims of the elected species, i.e., claims 1-5, 7, 11 and 15 and the generic claim 8 and its dependent claims (9, 13, 14)/8, were examined

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and claim 12 has been withdrawn from further consideration as directed to non-elected species.

The application is now refiled under the rule 37 CFR 1.114, and since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 12 has been withdrawn from consideration as being directed to a non-elected invention.

It is also noted that the applicant has canceled claims 8-9 and amended claims 13-14 in the pre-amendment filed with the request for continued examination under 37 CFR 1.114; therefore, there is not any generic claim(s) in the application at this time. As a result, claim 12 will not be rejoined because there is not any allowable generic claim(s).

Claim Objections

4. Claims 1, 13 and 14 are objected to because of the following informalities. Appropriate correction is required.

a) In claim 1: on line 2, the claim recites the feature thereof "said lens surface". There is insufficient antecedent basis for this limitation in the claim. Applicant should note that the claim recites a surface of an optical lens assembly (see lines 1-2 of the claim). Should the mentioned feature be changed to --said surface-- to make clear the feature claimed?

b) In claim 13: on line 2, the claim recites the feature thereof "said lens". There is insufficient antecedent basis for this limitation in the claim. Applicant should note that the claim recites an optical lens assembly (see lines 1-2 of the

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base claim 1). Should the mentioned feature be changed to --said lens assembly-- to make clear the feature claimed?

c) In claim 14: on line 1, the claim recites the feature thereof "the vane means". There is insufficient antecedent basis for this limitation in the claim. Applicant should note that the claim recites a plurality of vanes (see line 5 of the base claim 1). Should the mentioned feature be changed to --the vanes-- to make clear the feature claimed?

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1, 4-5, 7, 11 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones in view of Softly (both of record).

Jones discloses an apparatus for use with an optical device such as a binocular device, a telescope, a periscope, a riflescope, a night vision device or the like (see column 1). The apparatus disclosed by Jones is an improvement of the conventional art in which Jones teaches the use of a set of concentric circular vanes disposed in front of a lens surface of a lens assembly located within an optical device for the purpose of reducing the reflection of light incident on the lens reflecting surface of the lens assembly while still maintaining a substantially field of view for a user who makes an observation via the light passed through the vanes and the lens assembly (see column 2, for example). Each of the circular vanes has a first end disposed near the lens reflecting surface, and a second end

disposed away from the first end. It is also noted that a combination of concentric circular vanes and radial vanes is disclosed by Jones as can be seen at column 5 and shown in fig. 9. While Jones does not clearly state the apparatus is mounted on a field goggle; however, such a feature is inherent from the Jones' teaching because at column 1 he states that the apparatus can be used by a person of a battlefield troop in a night time in the form of a night vision device. See Jones, columns 1 and 3-4 and figs. 1 and 8-9, for example. Jones also teaches that his optical apparatus has a length-to-width ratio which is equal to or different from the length-to-width ratio of the field of view (see columns 2-4, claims 1 and 13, for example).

Thus, the arrangement of a set of vanes disposed in front of a lens surface having a curved shape of an optical device for reduction light reflections incident on the lens surface so that the light reflected from such lens surface is essentially not viewable by an observer located distal from the second ends of the vanes and so that a user viewing through the lens assembly can observe the image corresponding to the wide field of view of the lens assembly. The only feature missing from the Jones reference is that he does not clearly teach that the first ends of the concentric circular vanes are spaced further apart from each other at a different distance than the second ends of the concentric circular vanes are spaced apart from each other as claimed in the present claim 1.

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Regarding to the arrangement of the vanes in front of an optical element, in another embodiment disclosed in column 5 and shown in figure 10, Jones has suggested that the vanes are arranged in a non-parallel manner and in inclined angles different from 90 degrees with respect to the lens reflecting surface of an optical device. As a result of such an arrangement, the distance between two adjacent first ends of the vanes which ends located closer to the optical element is different from the distance defined between two adjacent second ends of the vanes located further from the optical element. While in the embodiment provided at column 5, John discloses the use of the inclined vanes in front of device having non-magnification feature such as a mirror or windshield; however, the inclined vanes are also used in front of other optical device having magnification as stated by John in column 6, lines 9-15 thereof "Structures in accordance with the inventions can be...the like." See also column 1.

Regarding to the feature that the first ends of the vanes are further spaced from each other than the second ends of the vanes are spaced apart as claimed, it is noted that such an arrangement of the vanes as claimed is merely that of a preferred embodiment and no criticality has been disclosed. The support for this conclusion is found in the present specification in which it suggests a variation of arrangements of the vanes. In one variation of arrangement of the vanes, the distance between two adjacent first ends is smaller than the distance between two adjacent

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second ends. See specification at pages 5-6 and figs. 6-7 and 10-11, for example

Further, it is noted that the use of an array of vanes disposed in front of a lens surface having a curved shape for the purpose of reduction light reflections incident on the lens surface wherein the distance between two adjacent first ends near the lens surface of vanes is larger than the distance between two adjacent second ends farther from the lens surface of the vanes for the purpose of reduction the light reflection incident on the lens surface is suggested to one skilled in the art as can be seen in the system provided by Softy. In particular, Softy discloses the use of an array of vanes (21) in front of a curved screen (11) and teaches that the vanes are arranged in a manner that the first ends near the curved screen of the vanes is spaced further apart from each other at a different distance than the second ends disposed farther from the curved screen of the vanes are spaced apart from each other. See columns 2-3 and figs. 2-4, in particular, at column 2, lines 52-57 which states: "In a television studio most of the ambient light falls towards the monitor screen from an upward direction rather from the side, and so the horizontally extending slats 21 are suitably positioned to intercept this light which would otherwise be reflected from the screen and impair the quality of the image."

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the apparatus having vanes disposed in front of a lens reflecting surface of an optical device as provided by Jones

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(column 5, lines 10-34) by rearranging the orientation of the vanes so that the distance between two adjacent first ends of the vanes is different from the distance defined between two adjacent second ends of the vanes and the distance between two adjacent first ends near the lens surface of vanes is larger than the distance between two adjacent second ends farther from the lens surface of the vanes as suggested by Softy for the purpose of reducing the light reflection while still maintaining the wide field of view of the optical device.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones in view of Softy as applied to claim 1 above, and further in view of Brennan (of record).

The combined product provided by Jones and Softy does not clearly disclose that the lens has a field of view of at least 40 degrees; however, a binocular device having a field of view of 60 degrees is known to one skilled in the art as can be seen in the binocular device provided by Brennan (see column 3 and fig. 5). Thus, it would have been obvious to one skilled in the art at the time the invention was made to use of the anti-reflection with non-parallel vanes as provided by Jones and Softy in a binocular device having a wide field of view such as the binocular provided by Brennan for the purpose of reducing reflections of light incident on a lens surface located behind the mentioned vanes in a binocular or telescope or goggles and simultaneously providing a wide field of view of at least 40 degrees for the user of such device.

Response to Arguments

8. Regard to the rejection of claims under 35 USC 103(a) over the art of Jones and Softy, applicant arguments provided in the amendment of 7/6/2004, pages 5-6, have been fully considered but they are not persuasive. The examiner respectfully disagrees with the applicant's opinions for the following reasons.

First, applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Second, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant should note that the claims are rejected by a combination of arts provided by Jones and Softy. The art of Softy is used by the examiner to show the use of an antireflection device mounted/arranged in front of an optical lens having an optical reflection surface for reducing the reflection wherein the antireflection device has a structure and arranged in a manner which is similar to that of the device claimed. In the device of Softy, the array of vanes disposed in front of a lens surface having a curved shape for the purpose of reduction light reflections incident on the lens surface wherein the distance between two adjacent first ends near the lens surface of a

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vane is larger than the distance between two adjacent second ends farther from the lens surface of the vane.

The examiner has not suggested to tried to bodily incorporate the two structures into one. The feature of variable orientation of slabs disposed in front of a reflecting surface provided by Softly is the suggestion which one skilled in the art will utilize to modify/improve the system of Jones for the purpose of increasing the ability of reduction of light refraction. Applicant should note that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

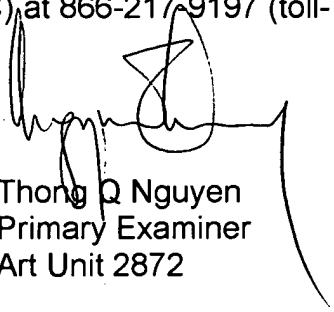
Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q Nguyen whose telephone number is (571) 272-2316. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thong Q. Nguyen
Primary Examiner
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